UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

December 3, 2012

Ms. Valerie Nottingham
NIH, B13/2S11
9000 Rockville Pike
Bethesda, MD 20892

Re: Draft Environmental Impact Statement (DEIS) for National Institutes of Health Animal Center Draft Master Plan, Dickerson, Montgomery County, Maryland, September 2012
CEQ 20120316

Dear Ms. Nottingham:

In accordance with the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act and the Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), the United States Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the National Institutes of Health Animal Center (NIHAC) proposed Master Plan. The document was prepared by NIH's Office of Research Facilities Development and Operations. Based on our review, we rate the environmental impacts of the proposed action as EC2 (Environmental Concerns/ Insufficient Information). A description of our rating system can be found at: http://www.epa.gov/compliance/nepa/comments/ratings.html. Environmental concerns that are raised by the proposed action include potential loss of forest and aquatic resources, impacts to air quality and impacts to water quality associated with waste and storm water. It is suggested that the Final EIS provide some additional information on proposed waste and stormwater management. Please refer to detailed comments, which are attached to this letter.

The NIHAC is set on 513 acres approximately, 4.5 miles west of Poolesvile and 30 miles northwest of the NIH Bethesda campus and provides a rural setting for the care and use of animals in support of NIH in the greater Washington, DC Metropolitan Area. The NIH purchased the property in 1960. The campus has 120 acres of pasture land, 127 acres of open space, and 217 acres of forest. Less than five percent of the property is developed; present on the property are several buildings for the facility including animal housing, a lab and offices. It is noted that much of the facility has surpassed expected operational life span or is in temporary structures. Two alternatives were considered in the DEIS: The Proposed Action and the No-Action. The Proposed Action is a Master Plan to guide the physical development of NIHAC over

the next 20 years. The Master Plan provides a planning framework for siting and development of facilities. Full execution of the Plan would increase the employee population from the current population of 199 to 212 by 2030.

According to the DEIS, the purpose and need for action is to: (1) establish a framework for the physical consolidation of the NIHAC campus; address the infrastructure constraints that limit growth on campus; ensure appropriate campus and facility utilization and functional land use; and minimize disruption to behavioral research; (2) create a framework for growth and change that is flexible and can adapt to the dynamic nature of NIH research, changes in technology, procedures and regulations, and the dependence on annual funding; (3) develop a campus plan that contains sustainable design components.

EPA strongly supports adoption of Low Impact Development methods, improved stormwater management, and incorporation of sustainable design in buildings and landscaping. Preservation of forest resource, enhancement of stream buffer, and protection of aquatic resources including wetlands is needed to support natural habitat and resource functions. We suggest that further efforts be made to avoid and minimize environmental impacts associated with the Master Plan activities. Please consider our attached detailed comments on the DEIS.

Thank you for the opportunity to offer these comments. If you have any questions, please contact Barbara Okorn at (215)814-3330.

Sincerely,

for

Jeffrey D. Lapp, Associate Director
Office of Environmental Programs

Detailed Comments

- The DEIS does not discuss alternatives for this project in other locations. It would be appropriate for the EIS to document any consideration or evaluation that was done of other sites that might have accepted the operations that will be expanded to the Dickerson site.

- It would be helpful if the DEIS provided more details about activities and impacts instead of referencing the Master Plan, which is not attached. For example, on page 3-61 the DEIS states that the Master Plan discusses various impacts to groundwater, but provides little discussion on this resource in the groundwater section.

- From the discussion on page 3-13 regarding potable water, it is unclear if the drinking water is sampled for potential contamination. Given the activities at the site we suggest that the water is sampled for contamination resulting from past and present activities, including farm waste, farm chemicals and other hazardous constituents related to operations at the Campus.

- Based on the information provided in the DEIS, it is unclear how the Campus will comply with the Chesapeake Bay Executive Order.

- Page 3-62 states that campus pastures have been used for animal grazing both historically and under NIH ownership. Facility grazing animals should be kept out of streams and wetlands. Buffers for streams and wetlands should be maintained or enhanced for water quality and ecosystem projection.

- Page 3-77 states that the emergency access road will impact approximately 0.5 acres of forested wetland and modifications to the security fence may impact some other habitats which have not been calculated. Additional efforts should be made to avoid and minimize impacts to wetlands and other environmental habitats caused by Master Plan activities.

- The DEIS states that the NIH would replace trees removed with a 1 to 1 tree replacement policy, resulting in no net long-term change to forested areas. More information should be provided on how this will be accomplished. Does this policy account for loss of functional value as well or only number of trees?

- The project schedule should be provided.

- We suggest the appropriate state and federal agencies be contacted annually regarding threatened and endangered species to account for any changes in the listing status over the next 20 or more years.

- Wastewater Treatment – The document discusses that a constructived wetland is being proposed to treat the facilities wastewater and that there will be upgrades to the existing

water treatment plant (WTP). The proposed treatment should be clarified. In either case the existing facility WTP is at or near capacity (effluent discharge increase of 72% during the summer and a 49% increase in the winter months). Mitigation measures include installation of additional filters. It is unclear what is being proposed for dissolved pollutants. As such, there is a need to provide greater detail on how the proposed project will comply with surface water permits.

- Stormwater Management - It appears that the stormwater management measures may be linked to the Master Plan's strategy on reducing the hydraulic capacity of the WTP. However, it is unclear whether the stormwater management measures will be installed. The Master Plan should have sufficient detail to determine how the stormwater management practices will reduce volume of wastewater going to the treatment plant.

- O3 Data - the O3 data provided in the DEIS shows exceedences of the NAAQS based on an average 8 -hour maximum value. The 3- year average of 4th high data values should be used for design value calculations. It does not appear that 3- year average of 4th high data values were used relative to the O3 values shown in Table 3-10 (page 3-37 of the DEIS).

- Page 3-38-The discussion under the section entitled; "Maryland's Air Quality Program" should include a discussion of Maryland's prevention of significant deterioration (PSD) program and its New Source Review (NSR) program.

- Page 3-38-The discussion of emission sources under the section entitled: "Emission Sources" at NIHAC should include a discussion regarding applicability of the Central Utilities Plant (CUP) to NSPS boiler regulations 40 CFR 60 Subppart Dc.

- Page 3-39- A discussion on applicability of the emergency generators to New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) regulations should be included in this page

- Page 3-39-The statement that permits to construct (PTCs) for individual emission units may be used to establish federally enforceable emission limits needs to be more definitive. If the PTCs are not issued then the facility might not continue to be a synthetic minor source and would have to undergo an analysis under Prevention of Significant Deterioration (PSD) and or New Source Review to see if the facility must comply with PSD and or NSR requirements of the Clean Air Act.

- Page 3-40-The discussion under the section entitled: "Onsite Stationary Sources" should include a discussion on the feasibility of using of natural gas versus fuel oil since the facility is in a nonattainment area for PM2.5

- Page 3-40-The statement that emissions associated with the new emergency generators would be offset by the removal of emergency generators associated with demolished

buildings, needs to be supported by data to assure that this statement is correct. How much emissions would be offset by the removal of generators from the demolished buildings? This should be discussed in more detail.

- Page 3-41-It is uncertain as to the basis of these values in the table shown on this page. Sample calculations for NOx and PM 2.5, based on AP-42 data indicate the values in the table should be much higher. The source for the values determined should be documented. Using AP-42 emission factors and calculating annual PM 2.5 emissions for distillate oil, yields 1.61 tons. Alternatively calculating the emissions using the existing PM emissions with a 36% increase in emissions based on the projected steam load yields 1.08 tons. Both answers are greater than the 1.0 tons shown in the table. Using emission factors based on AP 42, data for burning #2 fuel oil yields 15.45 tons of annual NOx emissions. Alternatively calculating emissions assuming a 36% increase in emissions in steam load and assuming a direct relationship with current emissions yields 14.14 Tons of NOx. Again, neither answer matches up with value in the table: 13.5 tons.

- Appendix B, page B-10- The feasibility of using natural gas should be included and what kind of PM emissions reductions could be expected.

- Appendix, page B-10-There should be a discussion on how much emissions will decrease or at least be offset by the removal of the emergency generators at the demolished buildings.

- Appendix, page B-11-The note under Table B-11 that emissions from emergency generators and propane combustion are not expected to change under the proposed action and so these emission sources are not included in this table would only make sense if emergency gensets built are equivalent to the ones demolished. As discussed previously, there is no data or calculations on which to base these assumptions. Also impacting this statement is if there will be a time overlap where the new gensets at new buildings are operated alongside old ones at yet-to-be demolished buildings.